

and thus the situation that a black display is reddened or blued can be effectively avoided. In addition, since the angle  $\theta_1$  (i.e., the angle formed by the transmission axis or absorption axis of the polarizer and the optical axis of the second retardation plate) is 15 to 35 degrees, and the angle  $\theta_2$  (i.e., the angle formed by the optical axis of the first retardation plate and the optical axis of the second retardation plate) is 60 to 80 degrees, the brightness and contrast ratio can be increased simultaneously, and the use of the two retardation plates permits a high-quality reflective display in which color correction is precisely performed in color display or monochromatic display.

[0015] On the other hand, in the reflective liquid crystal device in the second aspect,  $\Delta n_d$  of the first retardation plate is  $150 \pm 50$  nm (i.e., 100 to 200 nm), and  $\Delta n_d$  of the second retardation plate is  $610 \pm 60$  nm (i.e., 550 to 670 nm), and thus the situation that a black display is reddened or blued can be effectively avoided. In addition, since the angle  $\theta_1$  is 10 to 35 degrees, and the angle  $\theta_2$  is 30 to 60 degrees, the brightness and contrast ratio can be increased simultaneously, and the use of the two retardation plates permits a high-quality reflective display in which color correction is precisely performed in color display or monochromatic display.

[0034] Furthermore, in the transflective liquid crystal device in the first aspect,  $\Delta n_d$  of the first retardation plate is  $150 \pm 50$  nm (i.e., 100 to 200 nm) or  $600 \pm 50$  nm (i.e., 550 to 650 nm), and  $\Delta n_d$  of the second retardation plate is  $550 \pm 50$  nm (i.e., 500 to 600 nm), and thus the situation that a black display is reddened or blued can be effectively avoided. In addition, since the angle  $\theta_1$  (i.e., the angle formed by the transmission axis or absorption axis of the polarizer and the optical axis of the second retardation plate) is 15 to 35 degrees, and the angle  $\theta_2$  (i.e., the angle formed by the optical axis of the first

retardation plate and the optical axis of the second retardation plate) is 60 to 80 degrees, the brightness and contrast ratio can be increased simultaneously, and the use of the two retardation plates permits a high-quality reflective display in which color correction is precisely performed in color display or monochromatic display.

*H* [0035] On the other hand, in the transflective liquid crystal device in the second aspect,  $\Delta n$  of the first retardation plate is  $150 \pm 50$  nm (i.e., 100 to 200 nm), and  $\Delta n$  of the second retardation plate is  $610 \pm 60$  nm (i.e., 550 to 670 nm), and thus the situation that a black display is reddened or blued can be effectively avoided. In addition, since the angle  $\theta_1$  is 10 to 35 degrees, and the angle  $\theta_2$  is 30 to 60 degrees, the brightness and contrast ratio can be increased simultaneously, and the use of the two retardation plates permits a high-quality display in which color correction is precisely performed in color display or monochromatic display.

*P* [0080] Embodiments in the best mode for carrying out the present invention will be described in order based on the drawings.

*H* [0091] Although not shown in Figs. 1 and 2, a frame made of the same material as or a different material from the light shielding film in the color filter 23 is formed in parallel with the inside of the sealing material 32 to define the image display region. The frame may be formed on one or both of the second substrate 20 and the first substrate 10. Alternatively, the frame may be defined by the edge of a light shielding case in which the reflective liquid crystal device is contained.

*H* [0108] Unlike in the first embodiment, in the second embodiment,  $\Delta n$  of the first retardation plate 106 is  $150 \pm 50$  nm,  $\Delta n$  of the second retardation plate 116 is  $610 \pm 60$  nm, the angle  $\theta_1$  formed by the transmission axis or absorption axis of the polarizer

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105 and the optical axis of the second retardation plate 116 is 10 to 35 degrees, and the angle  $\theta_2$  formed by the optical axis of the first retardation plate 106 and the optical axis of the second retardation plate 116 is 30 to 60 degrees. Therefore, in the reflective liquid crystal device of the second embodiment, reflectance for light near the wavelength of 550 nm is increased to permit a bright reflective color display having high contrast. Furthermore, by using the two retardation plates, color correction can be easily and precisely performed, and a beautiful black display or white display (a black or white display without substantially no redness, blueness, greenness, or the like) can be obtained.

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**[0143]** Unlike in the sixth embodiment, in the seventh embodiment, And of the first retardation plate 106 is  $150 \pm 50$  nm, And of the second retardation plate 116 is  $610 \pm 60$  nm, the angle  $\theta_1$  formed by the transmission axis or absorption axis of the polarizer 105 and the optical axis of the second retardation plate 116 is 10 to 35 degrees, and the angle  $\theta_2$  formed by the optical axis of the first retardation plate 106 and the optical axis of the second retardation plate 116 is 30 to 60 degrees. Therefore, in the transreflective liquid crystal device of the seventh embodiment, reflectance for light near the wavelength of 550 nm is increased to permit a bright reflective color display having high contrast. Furthermore, by using the two retardation plates, color correction can be easily and precisely performed, and a beautiful black display or white display (a black or white display without substantially no redness, blueness, greenness, or the like) can be obtained.